

separation between the first and second clock frequencies;

a separation sensing circuit coupled to the clock source and generating an evaluation output as a function of the first frequency separation; [and]

a controller receiving the evaluation output, the controller having a timer that measures the frequency separation and a control output feeding back to the control input that stabilizes the first separation as a function of timing the evaluation outputs[;], the controller further having a correction circuit that corrects the level output as a function of the first frequency separation[.];

a divider circuit dividing the first and second clock frequencies and generating the transmit and the sample frequencies wherein the transmit and sample frequencies are separated from each other by a second frequency separation; and

the separation sensing circuit further coupling to the divider circuit and generating a second evaluation output coupling to the controller as a function of the second frequency separation.

~~20.~~ (Amended) The radar gauge of Claim [2]1 wherein the separation sensing circuit further comprises:

a circuit sensing a polarity of the sample clock and generating a further evaluation output representative of the polarity.

~~11~~ ~~12.~~ (Amended) A method of stabilizing clock generation in a radar gauge adapted to sense fluid level in a tank, comprising:
generating first and second clock frequencies separated from each other by a first frequency separation controlled

by a control input;
generating a first evaluation output as a function of the
first frequency separation;
generating a control output feeding back to the control
input that stabilizes the first separation as a
function of the evaluation output; [and]
generating a level output as a function of the stabilized
first frequency separation, the level output corrected
as a function of the first frequency separation[.];
dividing the first and second clock frequencies to generate
the transmit and sample frequencies separated from each
other by a second frequency separation;
generating a second evaluation output as a function of the
second frequency separation;
generating the control output as a further function of the
second evaluation output; and
correcting the level output as a function of the second
evaluation output.

REMARKS

This is in response to the Office Action mailed on July 19, 2000. In the Office Action, claims 1, 4-12, and 14-18 were rejected; claims 19 and 20 were allowed; and objections were raised to claims 2, 3, and 13. With this response, claims 2, 13, 17 and 18 are cancelled, claims 1 and 12 are amended, and the remaining claims are unchanged in the application.

Section 6 of the Office Action indicated that claims 2, 3, and 13 were objected to as being dependant upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant respectfully notes that the Office Action's Summary indicated claim 2 as one of the rejected claims. However, since Section 6 of the Office Action specifically